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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Stefan Hein

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FULBRIGHT & JAWORSKI, LLP
666 FIFTH AVE
NEW YORK, NY 10103-3198

EXAMINER

MOORE, KARLA A

ART UNIT

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1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/784,477	Applicant(s) HEIN ET AL.	
	Examiner KARLA MOORE	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/14/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1108</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 23,25, 28-36 and 39-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Of course, Applicant may write the claims as they see fit. However, the claims must still meet the guidelines of clarity and precision set forth in the MPEP. The pending claims contain numerous limitations lacking antecedent basis and/or where it is just not clear what specifically what Applicant intends to claim. *Applicant's (and Applicant's representative's) cooperation is requested in confirming, clarifying and/or correcting any such instances described below or instances that may have been overlooked by the Examiner, in order that it can be ensured that the scope of the pending claims is clear so the public is informed of the boundaries of what constitutes infringement of a patent that may issue and also such that a clear measure of what applicants regard as the invention is set forth so that it can be determined whether the claimed invention meets all the criteria for patentability and whether the specification meets the criteria of 35 U.S.C. 112, first paragraph with respect to the claimed invention.*

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4. Claim 28 has been interpreted as if it read "*the installation further comprising two uppermost partitions, wherein the two uppermost partitions enclose an angle of between 120 and 180 degrees downwards in relation to the axis (A).*"
5. Claim 30 has been interpreted as if it read "wherein a total of four guide rollers are positioned in *the vacuum chamber above the two uppermost partition.*"
6. Claim 31 has been interpreted as if it read "*the installation further comprising partitions, wherein the partitions have, at ends that face away from the rear wall, radial sealing strips against which the closing plate can be brought to rest.*"
7. Claim 34, has been interpreted as if it read "*the installation further comprising chamber sections, wherein the coating roller is surrounded at the end that face towards the closing plate and an end that faces away from the closing plate, inside the chamber sections, by strip-shaped screens that are curved cylindrically and coaxially, which screens enclose said ends that face towards and away from the closing plate with narrow gaps and shield the coating roller from being coated on surfaces thereof that are not covered by the strip.*"
8. Claim 35 has been interpreted as if it read "*wherein at least one of the screens is a front screen having an elastomeric sealing edge against which the closing plate can be brought to rest when the vacuum chamber is closed.*"
9. Claim 35 has been interpreted as if it read, "*wherein the installation further comprises a ring sector which extends over the circumference of the coating roller as far as its end edge that faces toward the closing plate inside the front screen.*"

10. Claim 40 has been interpreted as if it read, "*wherein installation further has side chambers and the vacuum chamber has chamber sections*, wherein each of the chamber sections of the vacuum chamber and *the* side chambers is connected to a vacuum pump of its own".

11. With respect to specific instances where the claims have been found to be indefinite because of a lack of antecedent basis, see, for example, the following: Claim 23 recites "at the ends", which has been interpreted as "at ends"; Claim 25 recites "the side of the coating roller", which has been interpreted as "a side of the coating roller", Claim 23 also recites "the curvature", which has been interpreted as "a curvature"; Claim 33 recites "the two uppermost partitions", it has been assumed that claim 29 was meant to depend from claim 28, rather than claim 22; Claim 33 recites "the supporting element", which has been interpreted as "the supporting elements"; Claim 36 recites "the front screen", it has been assumed that claim 36 was meant to depend from claim 35, rather than claim 34; claim 39 recites "the chamber section", which has been interpreted as "a chamber section"; and claim 39 recites "the side chambers", it has been assumed that claim 39 was meant to depend from claim 38, rather than claim 32.

12. Confirmation, clarification and/or correction is requested. Again, Applicant's cooperation is requested in clarifying the claimed invention.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 22-24, 27, 37-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 101 57 186 C1 to Erbkamm et al.

16. Erbkamm et al. disclose a web coating apparatus substantially as claimed having a vacuum chamber (1) which has between a back wall and at least one removable closing plate: a casing/shield with a flat cover (22), at least one guide roll (13) and a coating cylinder (15 and 16) with an axis, A, as well as at least one coating source (abstract) being disposed in the vacuum chamber, wherein the ends of the at least one guide roll and of the coating cylinder which face the closing plate are fastened (e.g. indirectly via parts to the cover with bearings and that the space in the vacuum chamber underneath the coating cylinder is kept free of supporting elements (see Figures 1 and 2; abstract).

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17. However, as noted above, Erbkamm et al. disclose that the coating roller and at least one guide roller are attached indirectly to the top of the installation, rather than directly. It is noted that the courts have ruled that an express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). The courts have also ruled that the mere rearrangement of parts which does not modify the operation of a device is prima facie obvious. In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950). In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

18. As disclosed in Muraoka, it is known in the art to mount roller devices of a running-length-work coating installation to a top of the installation, for example see Figure 3, in a fashion equivalent to when they are mounted to a side or bottom thereof without modifying the operation of the installation.

19. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have substituted equivalent top mounted guide and/or coating rollers in Erbkamm et al. without modifying the operation of the installation as demonstrated in Muraola.

20. With respect to claims 23 and 24, the coating cylinder is also journaled on the back wall. One of ordinary skill in the art would recognize that the same mechanism could be provided for the guide rolls as they function similarly (see Figure 2).

21. With respect to claim 27, within the vacuum chamber at least four sub chambers are formed on the circumference of the coating cylinder by dividing walls (17).

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22. With respect to claim 37, the size of the apparatus would be adapted to meet processing needs (e.g. substrate to be processed, desired throughput, etc.).

23. With respect to claims 38, 39 and 41, the vacuum chamber has on each side of the coating cylinder a side chamber (2 and 3) in which a winding mandrel, one for an unwinding roll (4 or 5) and one for a winding roll (4 or 5) as well as corresponding guide rolls (13). Further, at the upper sides of the side chambers lie at least substantially at the same level as the cover of the vacuum chamber.

24. Claims 25-26, 28-29, 30 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erbkamm et al. and Muraoka as applied to claims 22-24, 27, 37-39 and 41 above, and further in view of U.S. Patent No. 2,925,062 to Schwindt.

25. Erbkamm et al. and Muraoka disclose the invention substantially as claimed and as described above.

26. However, Erbkamm et al. and Muraoka fail to teach dividing walls for dividing the space underneath and laterally of the coating cylinder which have at their ends facing the coating cylinder sealing means whose curvature is adapted to the radius of the coating cylinder such that between the sealing elements and the coating cylinder arcuate sealing means whose curvature is adapted to the radius of the coating cylinder such that between the sealing elements and the coating cylinder arcuate sealing gaps are formed.

27. Schwindt teaches providing a plurality of gates and corresponding arcuate sealing members for the purpose of readily adjusting the clearance between separate sections of the coating apparatus (column 1, rows 52-64 and column 2, rows 43-68).

28. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a plurality of gates and corresponding arcuate sealing members in Erbkamm et al. in order to readily adjust the clearance between separate subsections of the coating apparatus as taught by Schwindt.

29. With respect to claims 28-29, the dividing walls are disclosed as claimed, see Figure 1 of Schwindt.

30. With respect to claim 30, guide rolls can be provided as needed in both Erbkamm and Schwindt in order to support and guide the web being processed.

31. With respect to claim 40, Schwindt teaches providing separate sections (subchambers and sidechambers) of a coating apparatus to separate vacuum pumps (column 3, rows 29-44).

Allowable Subject Matter

32. Claims 31-36 would appear to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

33. The prior art of record fails to teach or fairly suggest dividing wall have at their ends opposite from the back wall radially running sealing bars against which the closing plate can be placed in contact, as recited in claims 31 (and claims dependent thereon).

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The prior art of record further fails to teach or suggest the coating cylinder is surrounded at its ends within subchambers by strip-like masks covered cylindrically coaxially, which extend around the said ends with tight clearance and shield the coating cylinder against coating of their surface portions not covered by the web, as recited in claim 34 (and claims dependent thereon). Additionally, no other properly combinable art was located to supply the missing features along with the requisite motivations.

Response to Arguments

34. Applicant's arguments with respect to claims 22-41 have been considered but are moot in view of the new ground(s) of rejection. As detailed above, mounting rollers of a running-length-work installation to a top of the installation is known in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARLA MOORE whose telephone number is (571)272-1440. The examiner can normally be reached on Monday-Friday, 9:00 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Karla Moore/
Primary Examiner, Art Unit 1792